ASSEMBLING THE EMPEROR MOTH

ASSEMBLING THE EMPEROR MOTH (SATURNIA PAVONIA L.) IN ESSEX

By R. N. BAXTER*

I was interested in Colin Plant's notes regarding his assembling of two male *Saturnia pavonia* (*Ent. Rec.* 96:234). My experience of assembling this species at Forest Gate and Ilford may be of interest.

Up to 1982 I lived in Forest Gate, just a few minutes walk from Wanstead Flats. The 'Flats' is a large area of grassland with broom, bramble and hawthorn. In fact, an ideal habitat for *pavonia*. However, in all my years of living near the Flats, I have never seen a wild larva nor have I ever seen a male flying, as one would expect, if a colony, however small, existed.

Wanstead Park was, for me, a twenty minutes walk across the Flats. Although hardly a day passed without my taking a walk 'over the park', I have never seen *pavonia* there either, in any stage. Among the numerous species of Lepidoptera I bred each year at Forest Gate was *pavonia*. Providing my stock did not emerge too early in the season, I could always assemble males in my garden. Although I have no exact dates, it is probably thirty or more years ago that I first assembled a male in my garden. I have had as many as four or five arrive together while females were 'calling' and the time was always between 4 pm. and 5.30pm. The males were always later released and were never seen again, as one would have expected had they originated from a local colony.

Early in April 1982, I moved to South Ilford, which is approximately three miles distant from my previous home. My stock of *pavonia* cocoons began emerging towards the end of April and, as an experiment, I placed a cage containing a freshly emerged female which was 'calling', in my garden. No males arrived, and after two days the female paired with a bred male. I tried assembling males on each day but without success. By early May most of my cocoons had emerged but a few were late in developing. During the second week of May a female emerged and by 3pm. she was 'calling'. At 5.35pm. a male was seen flying over the garden and was not seen again for several minutes. It was having difficulty in locating the female as the wind was very strong and since I needed a wild male, I netted it.

It is certain that no colony exists in or close to Ilford and consequently, I am of the opinion that the males which I have assembled had travelled several miles – possibly more than five miles. How far though, I shall probably never know. My opinion is based on the time from when a calling female is taken into the garden and the period when the first male is noted, which has always been more

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than one hour. This theory is born out by the assembling of other moths in my garden. The lime hawk, *Mimas tiliae* L. is common in the llford area. I have picked up from roads larvae which were searching for a pupation site, a few minutes walk from my home. Last June, I placed calling *tiliae* females in my garden at 9.30pm and the first male arrived within fifteen minutes. On another occasion, a male arrived within five minutes. If *pavonia* occurred even three miles distant, they would arrive at my females much sooner than one hour.

Last May I received a 'phone call from an aquaintance living near Amersham, requesting some male pupae of *pavonia* as all his cocoons had emerged and that he had now just one female imago. Unable to help, I suggested he tried assembling in his garden. Two days later, with jubilation, he informed me that he had been successful in assembling a male, although he had never seen *pavonia* in his locality before.

It would be interesting if entomologists breeding *pavonia* carried out this simple experiment. The results, I believe, would be very interesting. If Colin Plant tries assembling *pavonia* in his garden or in the museum's ground, I believe he would be successful. And if he is, 1 will wager that no colony exists in East Ham or Stratford. More probable – that males would have originated from the east, possibly from Dagenham or Rainham.

I have made several abortive attempts at establishing *pavonia* on Wanstead Flat in the past years. I have tied out egg rings on brambles which subsequently hatched successfully and made regular visits to observe their progress. One year, nine larvae reached maturity but then disappeared. Whether they pupated or not I do not know for no moths were seen the following year.

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A Reply to Dr. Kettlewell's Contribution on Assembling of Lepidoptera.